

**Response under 37 C.F.R. § 1.116  
Expedited Procedure  
Examining Group 3777**

PATENT  
ATTORNEY DOCKET: 46884-5479

**IN THE UNITED STATES PATENT AND TRADEMARK OFFICE**

In re Application of: )  
Mitsuharu MIWA, et al. ) Confirmation No.: 7737  
U.S. Application No.: 10/580,007 ) Group Art Unit: 3777  
Filed: May 2, 2007 ) Examiner: Joel F. Brutus  
For: LYMPH NODE DETECTING APPARATUS )

Commissioner for Patents  
U.S. Patent and Trademark Office  
**Customer Window, Mail Stop AF**  
Alexandria, VA 22314

Sir:

**PRE-APPEAL BRIEF REQUEST FOR REVIEW**

In response to the Final Office Action dated April 28, 2011, the period for response to which extends through September 28, 2011, by the concurrently-filed petition for a two-month extension of time and corresponding fee payment, Applicants request review of the final rejection in the above-identified application via a Pre-Appeal Brief Conference. No amendments are being filed with this request. This request is being filed concurrently with a Notice of Appeal. The review is requested for the reasons stated on the attached sheets.

**Status of the Claims**

In the Final Office Action dated April 28, 2011, claims 1-2 and 4-8 stand rejected under 35 U.S.C. § 112, first paragraph as allegedly failing to comply with the written description requirement. Claims 1-2 and 4-8 stand rejected under 35 U.S.C. § 103(a) as being unpatentable over Hayashi (U.S. Patent Application Publication No. 2002/0013531) (hereinafter “Hayashi”) in view of Sekiguchi (U.S. Patent No. 4,821,117) (hereinafter “Sekiguchi”) and further in view of Konomura et al. (U.S. Patent No. 5,697,885) (hereinafter “Konomura”).

**Rejections under 35 U.S.C. § 112, First Paragraph**

Claims 1-2 and 4-8 stand rejected under 35 U.S.C. § 112, first paragraph as allegedly failing to comply with the written description requirement. The Office Action asserts, at page 2, section 2, that a feature of claim 1, line 12 of “as a single image” is not supported in the disclosure. More particularly, the Office Action sets forth that Applicants “disclose in paragraph 0050 that normal and fluorescence images are overlapped … but fails to disclose the images are acquired as a single image as claimed.” This rejection is respectfully traversed.

The specification and drawings of the instant application provide teachings of the normal and fluorescence images being overlapped and acquired “as a single image.” In this regard, the Examiner concedes in the above-quoted portion of the Office Action that Applicants “disclose in paragraph 0050 that normal and fluorescence images are overlapped.” An example of this is shown in Fig. 4. Fig. 4(a) shows a fluorescence picture image, Fig. 4(b) shows a normal picture image, and Fig. 4(c) shows an observation image in which the images of Figs. 4(a) and 4(b) are overlapped. Accordingly, the disclosure of the instant application describes that this overlapping occurs in the observation image shown in Fig. 4(c). See, for example, the discussion of Fig. 4(c) in paragraph [0038] of the specification.

This “observation image” is disclosed as being a single image which is output from the image pickup device (4 in Fig. 1). See, for example, Fig. 4(c) of the instant application which shows a single observation image in which the fluorescence picture image and the normal picture image (reflection image of the excitation light) are overlapped. See page 5, lines 21-23 of the specification. In addition, paragraph [0026] of the specification explains that the image pickup device 4 “outputs an obtained observation image as image data (emphasis added).” See also

paragraph [0012] of the specification which explains that “[a]n observation image, in which the fluorescence image and the reflection image are overlapped, can thereby be obtained.”

Paragraph [0028] of the specification explains that an adjusting device 5 “is provided for the observation image output from image pickup device 4 (emphasis added).” Paragraph [0038] of the specification refers to “an observation image, such as shown in FIG. 4(c) (emphasis added). Accordingly, Applicants respectfully submit that the specification provides numerous instances of clear support for the language in independent claim 1 of the instant application that the normal and fluorescence images are overlapped and acquired as a single image, namely, the above-described “observation image.” Accordingly, the Office Action includes a clear error at page 2, section 2 in its assertion that acquiring normal and fluorescence images “as a single image” is not supported in the disclosure. Accordingly, withdrawal of the rejections under 35 U.S.C. § 112, first paragraph is respectfully requested.

#### **Rejections under 35 U.S.C. §§ 102(b) and 103(a)**

Claims 1-2 and 4-8 stand rejected under 35 U.S.C. § 103(a) as being unpatentable over Hayashi in view of Sekiguchi and further in view of Konomura. This rejection is traversed.

The Office Action concedes, at page 4, that Hayashi “may not mention” normal and fluorescence “images are overlapped and obtained as a single image.” However, the Examiner then applies Sekiguchi as teaching “visible radiation image and the fluorescent image are simultaneously displayed or overlapped on the display unit 41.”

The Office Action’s application of Sekiguchi in this regard is thus only to show the final result of displaying or overlapping a visible radiation image and a fluorescent image on a display unit which is standard in conventional arrangements. Conventional arrangements utilize a plurality of image pickup devices, for example, one for a visible radiation image and one for a fluorescent image, and also utilize a superimposer arrangement in order to superimpose images from the plurality of image pickup devices.

Such conventional arrangements are particularly different from the disclosure of the instant application in which an observation image includes an overlapped fluorescence picture image and a normal picture image that is obtained as a single image by a single image pickup device. Such an observation image is shown in Fig. 4(c) of the instant application. As this

single observation image is output from a single image pickup device 4 (as shown in Fig. 1), a superimposer arrangement used in conventional arrangements is no longer necessary.

In the Office Action dated April 28, 2011, the Examiner appears to understand that this is the case because a newly-applied reference to Konomura has now been added in combination with the previously-applied Hayashi and Sekiguchi references. The Examiner states, at page 4 of the Office Action, that Konomura discloses “in the publication of Japanese patent application laid open No.57784/1985 is disclosed an apparatus to overlap the visible image and infrared image taken at the same time [see column 2 lines 10-16].”

In light of the Examiner’s newly-applied assertions regarding Konomura, Applicants obtained a copy of this Japanese Publication No. 57784/1985 (JP Pub. No. S60-57784) (hereinafter “JP 784”) in order to better understand the Examiner’s position in light of the minimal discussion in this regard in the Office Action’s applied portion at col. 2, lines 10-16 of the Konomura reference. A copy of JP 784 was supplied to the Examiner, together with an English-language abstract, for the Examiner’s information, via facsimile on August 25, 2011 in advance of a telephone discussion of the issues described in this paper on August 26, 2011.

Applicants traverse the Office Action’s assertions regarding Konomura because Applicants understand that JP 784 has a configuration that is basically the same as that disclosed in Fig. 5 of the above-discussed Hayashi reference. Applicants note that in the apparatus disclosed in Fig. 1 of JP 784, a beam splitter (e.g., a dichroic mirror) 4, a visible ray detector 5, and an infrared ray detector 6 are provided for light from an object 1. Similarly, in the apparatus disclosed in Fig. 5 of Hayashi, a dichroic mirror 223, a color CCD 222, and a near-infrared use CCD 221 are provided for light from a tissue under examination 10.

Therefore, in the apparatus of JP 784 described in Konomura, similar to the configuration of Hayashi, the observation image, in which the fluorescence picture image and the normal picture image are overlapped cannot be obtained as a single image by the single image pickup device as described in the advantageous combination of features of independent claim 1. Accordingly, Konomura does not cure the deficiencies of Hayashi and Sekiguchi as discussed above and also as discussed in the previously-filed responses to date in the instant application.

Applicants also traverse the combination of these references because, as discussed in MPEP § 2143.01 VI, this combination would change the principle of operation of the prior art. Applicants note that in the configuration disclosed in JP 784, an optical scanning system 2 and a synchronizing signal generating section 10 are provided for horizontally and vertically scanning the object 1 on the same optical axis. By utilizing this scanning system 2 and the synchronizing signal generating section 10, a two-dimensional image of the object 1 is acquired by the detectors 5 and 6 and is displayed on a display screen 13. Thus, similar to the conventional arrangements discussed previously, this arrangement requires two separate detectors, namely a visible ray detector 5, and an infrared ray detector 6 which operate together with relatively complex circuitry such as a scanning system 2 and a synchronizing signal generating section 10.

In this regard, each of the applied Hayashi, Sekiguchi, and Konomura references discloses arrangements which utilize multiple detectors or multiple light paths for the fluorescent image and the normal image, respectively. For example, Fig. 1 of Sekiguchi includes a light path for fluorescent images 16 and a separate light path for visible radiation images 15 and shutters 21 and 22 to alternately close the light paths 15 and 16 so that a camera 12 receives the visible radiation image and the fluorescent image one after the other. See, for example, the discussions of Hayashi and Sekiguchi at pages 7-9 of the Amendment filed on February 16, 2011 in this application. See also the discussion presented above of the newly-applied Konomura reference. Accordingly, modifying these applied arrangements so that a single observation image including an overlapped fluorescent image and normal image is obtained by a single image pickup device would clearly change the principle of operation of the prior arrangements.

Also, it is well settled that rejections on obviousness grounds cannot be sustained by mere conclusory statements. In re Kahn, 441 F.3d 977, 988 (Fed. Cir. 2006) (hereinafter “In re Kahn”). “To facilitate review, this analysis should be made explicit.” KSR Int’l Co. v. Teleflex, Inc., 127 S. Ct. at 1727, 1741 (2007). Importantly in this regard, In re Kahn requires that the Examiner provide some articulated reasoning explaining exactly how the proposed modification of the disclosures of the applied references would be configured to result in a workable arrangement. The Office Action does not clearly articulate how the arrangements of each of the applied references would be modified in a manner that would result in a workable arrangement to meet the combination of features of claim 1.

For example, Applicants believe that the configuration including the above-described scanning system as disclosed in JP 784 is quite different from the configuration of the instant application's disclosed arrangement utilizing an image pickup device and is also quite different from the above-discussed configuration of Fig. 5 of Hayashi utilizing CCD's 221 and 222. In addition, paragraph [0090] of Hayashi discloses that the normal image and the fluorescent image are photographed in a time division manner and thus are not simultaneous. Finally, the normal picture image of Hayashi is not disclosed as being a reflection image of excitation light as described in claim 1. In this regard, Applicants refer to the discussion at page 7 of the Amendment previously-filed on February 16, 2011 in this application and also at page 7 of the Amendment previously-filed on October 6, 2009 in this application.

The Office Action makes a conclusory assertion that "one with ordinary skill in the art ... would have been motivated to combine Hayashi with Sekiguchi and Konomura ..." without providing any further detail articulating exactly how the respective arrangements of the applied references would be modified or combined together in a manner that would result in a workable arrangement to meet the combination of features of independent claim 1 of the instant application.

For at least the foregoing reasons, the rejection of claims 1-2 and 4-8 under 35 U.S.C. § 103(a) should be withdrawn.

### **CONCLUSION**

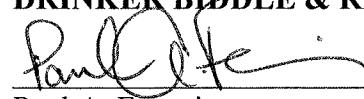
In view of the foregoing, Applicants request that the outstanding rejections be withdrawn, and claims 1, 2 and 4-8 should be allowed.

Respectfully submitted,

**DRINKER BIDDLE & REATH LLP**

Dated: September 28, 2011

By:

  
Paul A. Fournier  
Reg. No. 41,023

**Customer No. 055694**

**DRINKER BIDDLE & REATH LLP**

1500 K Street, N.W., Suite 1100

Washington, DC 20005-1209

Tel.: (202) 842-8800; Fax: (202) 842-8465